

## Seed Damage by Stink Bugs in Early Maturing Soybean Cultivar as Affected by Seeding Dates

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### Objective

To find an optimum seeding time of soybean seed to minimize damage by stink bugs in non-controlled soybean cultivation with early maturing soybean cultivar of Keunol in Yeongnam region

### Material and Method

- Duration : 2004 ~ 2005
- Variety : Keunol
- Planting distant(cm) : 60×15(May), 60×10(June)
- Plants per hill : 2 plants
- Seeding date(Month/Day) : 5/5, 5/20, 6/4, 6/19
- Fertilizer (N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O) : 3-3-3.4kg/10a

### Result and Discussion

In these days, self-supply of domestic production soybean and production of naturally compatible and non-polluted soybean are greatly issued in Korea. Recently, yield reduction and lowering quality by stink bugs in soybean production is serious problem in soybean production farm. We carried out the experiment as above.

The results are follow ;

1. The lowest damage of soybean seed in non-controlled plot was observed at the June 4 seeding and thereby commercial yield was the highest.
- 2 .Especially, the seeding date of soybean from the first part of May to the end of May had lowering quality of soybean because damaged seed by stink bugs is easily rotted on high temperature and humidity from in the middled to in the latter part of August during maturing.
3. Considering commercial yield, damaged seed by stink bugs and seed quality in non-controlled cultivation of soybean, an optimum seeding dates to minimize damage was found to be the June 4 in Yeongnam region.
4. The suitable linked crops for cropping system with early June seeding of soybean are warm season garlic, spinach, barley and tobacco.

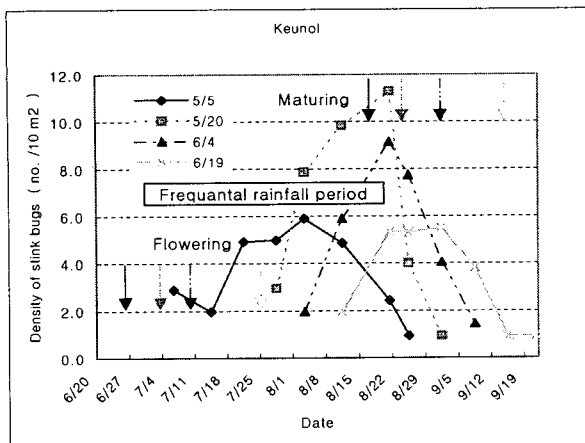


Fig. 1. Changes of stink bugs occurrence in four seeding dates according to developmental stage of soybean. dates.

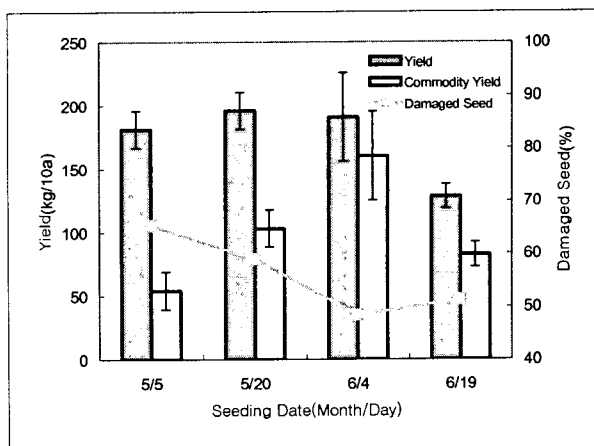


Fig. 2. Yield, commercial yield, and damaged soybean seed by stink bugs in four seeding

Table 1. Possible cropping systems for early June in different regions compatible with early maturing soybean cultivar.

Cropping system	Month												Region
	1	2	3	4	5	6	7	8	9	10	11	12	
barley-soybean	barley			soybean			barley			Masan, Kosung, Sachun, Guejae			
soybean-spinach	spinach			soybean			spinach			Kosung, Namhae, Hamyang			
tobacco-soybean	tobacco			soybean						Cheongsong, Andong, Euryung			
garlic-soybean	warm season garlic			soybean			garlic			Namhae, Tongyeong			

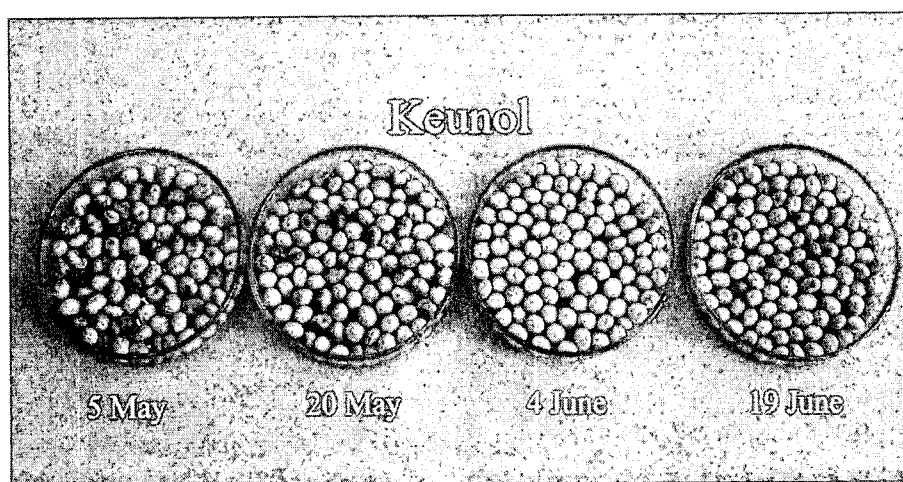


Fig 3. Damaged soybean seed by stink bugs in four seeding dates.